

ABSTRACT OF THE DISCLOSURE

A machining unit for a program-controlled milling and drilling machine. A head support movable in several coordinate axes has an axis of rotation pointing forward and downward at a 45° angle. A swivel head arranged on a front side of the head support is rotatable about the axis of rotation. A spindle nose is fixedly mounted on the swivel head and has a working spindle with an axis extending at an angle of 45° relative to the axis of rotation. A spindle motor is aligned coaxially with the axis of rotation and a bevel gear arranged in the swivel head for the motor shaft. The swivel head has a cylindrical hollow housing member coaxial with the axis of rotation and in which the spindle motor is mounted. The head support has a housing neck in which the housing member of the swivel head is rotatably supported.